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PATENT 2001P07594US02

## Amended claims

1. (Currently Amended) A method for determining identifier codes for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the steps activities of:

receiving a first message including at least a first identifier code identifying an object, said first identifier code being associated with a first entity;

extracting said first identifier code from said received first message; accumulating, in a first database, object identifier code mapping

information from identifier codes derived from message data;

generating a plurality of messages incorporating said extracted first identifier code, said plurality of messages being for initiating a search of a plurality of different remote identifier code databases including said first database, said databases linking said first identifier code associated with said first entity to corresponding different identifier codes identifying said object, said different identifier codes being associated with entities different to said first entity; and

receiving said different identifier codes corresponding to said first identifier code in response to communicating said plurality of messages for initiating searches of said plurality of different remote identifier code databases.

- 2. (Previously Amended) A method according to claim 1, wherein updating said plurality of databases to incorporate said different identifier codes identifying said object.
- 3. (Previously Amended) A method according to claim 2, wherein said plurality of messages use Simple Object Access Protocol (SOAP) for updating said plurality of databases.
- 4. (Currently Amended) A method according to claim 1, including the step activity of

communicating said plurality of messages to applications useable for initiating a search of said plurality of different remote identifier code databases.

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5. (Previously Amended) A method according to claim 1, wherein a message of said plurality of messages initiates a prioritized search of a database and

an object comprises at least one of, (i) an article of manufacture, (ii) a service and (iii) a non-manufactured item and

an entity comprises at least one of, (a) an object retailer, (b) an object wholesaler, (c) an object distributor, (d) an object manufacturer, (e) an object servicing enterprise and (f) an object seller.

- 6. (Previously Amended) A method according to claim 5, wherein said prioritized search of said database searches first for a purchaser product identifier code identifying said object and subsequently for a manufacturer product identifier code identifying said object.
- 7. (Currently Amended) A method according to claim 1, wherein said extracting step activity comprises

extracting deriving said first identifier code and a corresponding third identifier code identifying said object from said received first message, and said generating step activity generates a plurality of messages incorporating said extracted derived first and third identifier codes.

- 8. (Previously Amended) A method according to claim 7, wherein said first identifier code comprises a purchaser product identifier code and said third identifier code comprises a manufacturer product identifier code and a message of said plurality of messages initiates a prioritized search of a database involving searching first for said purchaser product identifier code and subsequently for a manufacturer product identifier code.
- 9. (Previously Amended) A method according to claim 1, wherein said message of said plurality of messages incorporates rules determining conduct of said search of said identifier code database.
- 10. (Currently Amended) A method according to claim 9, wherein said rules are predetermined in an application used for accessing said database.

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11. (Currently Amended) A method according to claim 1, including the step activity of

communicating said plurality of messages to applications for accessing databases using at least two of, (a) Hypertext Transfer Protocol (HTTP), (b) Simple Object Access Protocol (SOAP) and (c) XML (Extensible Markup language).

12. (Previously Amended) A method according to claim 1, wherein said

said method comprises an identifier code mapping application and said identifier code mapping application and one of said plurality of different remote identifier code databases are co-located on the same processor, said processor comprising one of (a) a server, (b) a PC (c) a wireless device, (d) a mainframe computer and (e) another networked processing device.

- 13. (Previously Amended) A method according to claim 1, wherein at least one of said first and said different identifier codes comprise one of (a) a Universal Product Code and (b) a code associated with a bar code.
- 14. (Currently Amended) A method for supporting a transaction in accordance with claim 1, wherein

said first message is received from an application initiating a transaction and including the step activity of,

forwarding a composite message to a destination application in support of said transaction, said composite message being created including information derived from said first message and including one of said different identifier codes. Ser. No. 09/973,349

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15. (Currently Amended) A method for determining a specific identifier code for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the steps activities of:

receiving a first message including at least a first identifier code identifying an object, said first identifier code being associated with a first entity;

extracting deriving said first identifier code from said received first message;

accumulating, in a first database, object identifier code mapping information from identifier codes derived from message data;

generating a second message incorporating said extracted derived first identifier code, said second message being for initiating a search of a remote identifier eode said first database mapping said first identifier code associated with said first entity to a corresponding second identifier code identifying said object and said second message incorporates data representing rules determining conduct of said search of said identifier code database, said second identifier code being associated with a second entity different to said first entity;

receiving said second identifier code corresponding to said first identifier code in response to communicating said second message for initiating a search of said remote identifier code database.

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16. (Currently Amended) A method for determining identifier codes for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the steps activities of:

receiving a first message including at least a first identifier code identifying an object, said first identifier code being associated with a first entity;

extracting deriving said first identifier code from said received first message;

accumulating, in a first database, object identifier code mapping information from identifier codes derived from message data;

generating a plurality of messages incorporating said extracted derived first identifier code, said plurality of messages being for initiating searches of a corresponding plurality of said first database and a remote identifier code database, said databases mapping said first identifier code associated with said first entity to corresponding different identifier codes identifying said object, said different identifier codes being associated with entities different to said first entity;

receiving said different identifier codes corresponding to said first identifier code in response to communicating said plurality of messages for initiating a search of said plurality of different remote identifier code databases; and

updating said plurality of remote identifier code databases to incorporate corresponding received different identifier codes identifying said object.

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17. (Currently Amended) A method for providing identifier codes for an object associated with a plurality of identifier codes by a corresponding plurality of entities, comprising the steps activities of:

receiving from a remote source a first message including at least a first identifier code identifying an object, said first identifier code being associated with a first entity and said first message requesting determination of a specific identifier code for said object;

extracting deriving said first identifier code from said received first message;

accumulating, in a first database, object identifier code mapping information from identifier codes derived from message data;

initiating a search of a plurality of different remote identifier code databases including said first database, said databases linking said first identifier code associated with said first entity to corresponding different identifier codes identifying said object, said different identifier codes being associated with entities different to said first entity using said extracted first identifier code;

receiving said different identifier codes corresponding to said first identifier code in response to said initiated search of said plurality of different remote identifier code databases; and

providing said different identifier codes to said remote source.

18. (Currently Amended) A method according to claim 17, including the step activity of

generating a record of said search and provision of said different identifier codes for use in at least one of, (a) billing, and (b) creating a transaction record.

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- 19. (Currently Amended) A system for identifier codes for an object associated with a plurality of identifier codes, comprising:
- a communication processor for bidirectionally communicating with remote applications;
- a plurality of different remote identifier code databases including a first database incorporating object identifier code mapping information accumulated from identifier codes derived from message data;

a first application for,

initiating a search of said plurality of different remote databases to translate a first identifier code identifying an object associated with a first entity to corresponding different identifier codes identifying said object, said different identifier codes being associated with entities different to said first entity, in response to receiving a message including a plurality of corresponding identifier codes identifying said object and provided by remote applications, and for

updating <u>at least one of</u> said plurality of different <del>remote</del> databases to incorporate corresponding different identifier codes identifying said object; and

providing said different identifier codes, corresponding to said first identifier code in response to said initiated search of said plurality of different remote identifier code databases, via said communication processor.

20. (Original) A method according to claim 19, wherein an object comprises at least one of, (a) an article of manufacture, (b) a service and (c) a non-manufactured item and

an entity comprises at least one of, (a) an object retailer, (b) an object wholesaler, (c) an object distributor, (d) an object manufacturer, (e) an object servicing enterprise and (f) an object seller.